Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 19 with the following rewritten paragraph:

Subscribers today are demanding additional capability of their telephone service. An outcome of this demand is that the telephone service providers must install additional lines in the home to support this demand. The challenge faced by the providers is that the existing ~~in~~ home wiring is limited in many cases to a single wire pair. This means that additional wire pairs must be pulled through walls in the home to add the requested new service. The wire installation procedure is both expensive for the service provider and disruptive for the subscriber because drywall must be cut and potentially repaired in the home.

Please replace the paragraph beginning on page 2, line 7 through page 3, line 31 with the following rewritten paragraph:

FIG. 1a is a system block diagram of an exemplary in home telecommunications system;

FIG. 1b is a system block diagram of the exemplary in home telecommunications system of FIG. 1 illustrating an exemplary signal flow path in a residential gateway;

FIG. 2 is a system block diagram of an exemplary residential gateway;

FIG. 3 is a graphical depiction of an exemplary chaining mode operation of the system direct memory access controller for the exemplary residential gateway of FIG. 2;

FIG. 4 is a system block diagram of an exemplary DSP based voice and data processor;

FIG. 5a is an exemplary software architecture operating on the DSP platform of FIG. 4;

FIG. 5b is a block diagram of an exemplary architecture for interfacing ~~the~~ a voice and data processor with a MIPS core processor in a residential gateway;

FIG. 5c is a block diagram of an exemplary architecture for a residential gateway control protocol logic which interfaces with an external control element, ~~called~~ calls a call agent or call management server (CMS), to terminate and generate call signaling from and to a voice and data processor in compliance with the network-based call signaling (NCS) protocol specification;

FIG. 5d is a block diagram of an exemplary method for converting between real time protocol packets from a WAN and an internal format protocol used by a voice and data processor in a residential gateway;

FIG. 5e is a block diagram of an exemplary software messaging interface between a DSP based voice and data processor in a residential gateway and a remote media terminal adapter;

FIG. 5f is a table illustrating an exemplary call flow for an outgoing call origination;

FIG. 5g is a block diagram of an exemplary software messaging interface between a DSP and a hardware abstraction layer for ~~based~~ a voice and data processor;

FIG. 5h is a block diagram of an exemplary channel associated signaling service logic for exchanging commands and events between a host applications layer for a voice and data processor and standard commercial analog loop/ground start devices such as for example plain old telephone sets;

FIG. 6 is an exemplary state machine diagram of the operational modes of a virtual device driver for packet based network applications;

FIG. 7 is a system block diagram of an exemplary voice and data processor operating in a voice mode;

FIG. 8 is a system block diagram of an exemplary voice and data processor operating in a real time fax relay mode;

FIG. 9 is a system block diagram of an exemplary voice and data processor operating in a modem relay mode;

FIG. 10 is a system block diagram of an exemplary HomePNA controller;

FIG. 11 is a block diagram of an exemplary HomePNA analog front end;

FIG. 12 is a perspective view of an exemplary HomePNA telephone;

FIG. 13 is a system block diagram of the exemplary HomePNA telephone of FIG. 12;

FIG. 14 is a system block diagram of an exemplary voice processing engine for the HomePNA telephone of FIG. 12;

FIG. 15 is a system block diagram of an exemplary HomePNA controller for the HomePNA telephone of FIG. 12; and

FIG. 16 is a system block diagram of an exemplary voice processing engine for a HomePNA adapter.

Please replace the paragraph beginning on page 4, line 30 through page 5, line 7 with the following rewritten paragraph:

In the exemplary residential gateway, a cable modem is used as described by the CableLabs DOCSIS specification except that the telephony and services delivered to the subscriber port 106b are not limited to Ethernet, but rather can support any physical media and protocol compatible with the specific in home LAN. In the described exemplary embodiment, the residential gateway 102 supports ~~to~~ two protocols at the subscriber ports 106a and 106b. The first protocol is a baseband protocol to deliver POTS to the conventional telephone 108 via the first subscriber port 106a. This protocol is described by Bellcore (now Telcordia) in TR-NWT-000057, the contents of which is expressly incorporated herein by reference as though set forth in full. To this end, the exemplary residential gateway 102 may include high voltage circuits and processing elements to convert packetized voice delivered over IP network to the continuous analog voltages used for POTS. The second protocol is HomePNA (Home Phoneline Network Alliance) to deliver telephony and services over the LAN 110 via the second subscriber port 106b, and is described in the HomePNA Specification Version 2.0, the contents of which is expressly incorporated herein by reference as though set forth in full.

Please replace the paragraph beginning on page 7, line 1 with the following rewritten paragraph:

In the downstream direction, the DOCSIS MAC/PHY 134 determines whether the packet payload is voice or data. If the packet payload is data, then the DOCSIS MAC/PHY 134 routes the packet directly to a HomePNA controller 138. The HomePNA controller 138 translates the data packet to a HomePNA packet and transmits the HomePNA packet to a media terminal adapter (MTA) 140 over the HomePNA LAN 110. The MTA 140 represents any HomePNA device shown connected to the HomePNA LAN in FIG. 1a. Conversely, if the DOCSIS MAC/PHY 134 determines that the packet payload is voice, the packet is routed to a proxy gateway 142 to be processed in a manner to be described in greater detail below. The proxy gateway 142 further determines whether the packet is destined for the HomePNA LAN 110 or the POTS telephone 108. If the packet is destined for the POTS telephone, the packet is routed to a voice and data processor 136 for decompression and depacketization in a manner to be described in greater detail below. The voice and data processor 136 generates an analog voice signal from the decompressed signal and delivers the analog voice signal to the POTS telephone 108 via the SLIC 109. If the proxy gateway 142 determines that the packet is destined for the HomePNA LAN 110, then the processed packet is routed to the HomePNA controller 138 for conversion to a HomePNA format for transmission to the MTA 140 over the HomePNA ~~lAN~~ LAN 110.